

ULV spraying technology for the concrete industry



Save up to 75 % release agent

Modular and handheld spraying systems

In addition to economising on the use of release agent, Mantis ULV (Ultra Low Volume) rotary nozzles and metering technology offer numerous other advantages in the production of precast concrete parts:

- ▶ Uniform droplet size
- ▶ Even distribution of release agent
- ▶ Optimal surface structure of the concrete
- ▶ Easy release from the mould



best available technology

Save up to 75% release agent thanks to innovative ULV spraying technology

ULV stands for Ultra Low Volume, i.e. exceptionally low application rate. The special ULV rotary nozzles from Mantis produce uniformly small droplets without pressure and distribute them evenly over the sprayed area.

Easy release of the concrete parts from the moulds and a very smooth surface texture of the concrete can be achieved with just a minimal quantity of release agent.

Mantis offers ULV spraying systems for permanent installation as well as mobile handheld sprayers.



Main application areas

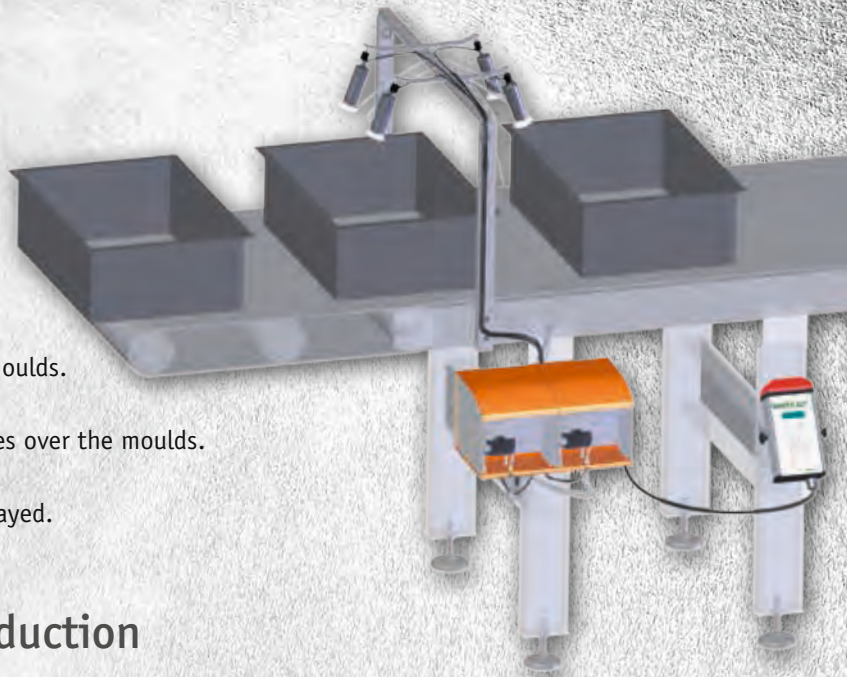
- ▶ **Large area application** e.g. in the production of large precast concrete elements on long tracks, such as ceilings and walls.
- ▶ **Flat moulds** for precast concrete elements, which are produced by the wet-cast process and which require optimum surface quality.



Modular MANTIS ULV[®] spraying systems

Thanks to its modular design, MANTIS ULV[®] technology can be integrated into almost every process chain. The ULV rotary nozzles can be mounted in existing systems in various ways:

- ▶ **Fixed installation**
whereby the nozzle(s) are installed over the moving moulds.
- ▶ **Fixed installation**
whereby the nozzles are built on a structure that moves over the moulds.
- ▶ **Mounted on a mobile frame**
the nozzles can be moved across the moulds to be sprayed.



Optimum adaptation to your production processes with two variants:

Independent spraying system with peristaltic pump and control unit

This option is suitable if the spraying system is to be independently controlled and monitored. One control unit can steer up to 4 nozzles.



Advantages:

- ▶ The pump set can be extended from one to two pumps or nozzles.
- ▶ The control unit allows the monitoring of up to 4 nozzles.
- ▶ The current flow rate and the quantity already sprayed can be read from the display.

Spraying system with a 6-piston pump without its own control unit

This option is particularly suitable for integration into a centrally controlled process chain. For each nozzle a separate pump is mounted.



Advantages:

- ▶ The spraying system can be switched on and off via a PLC control unit.
- ▶ The flow rate can be adjusted individually for each nozzle.
- ▶ The number of nozzles can be chosen freely.

Contact us so that we can offer you a spraying system tailored to your requirements!

BEMA® handheld sprayers

BEMA® handheld sprayers are ideally suited for flexible and mobile use. The ULV rotary nozzle can be turned sideways so that even edges of moulds and vertical formwork elements can easily be sprayed without needing to rotate the entire sprayer. The battery level and the nozzle are electronically monitored. There are models with long or short shafts so that forms on tables can easily be sprayed also.

In **BEMA models without a pump**, the release agent is led to the nozzle by gravity. The device must therefore always be held upright so that the nozzle is lower than the tank for the sprayer to function correctly. The application rate is set with a metering valve.

In **BEMA-P models with a pump**, a membrane pump, which is integrated in the handheld device, ensures the transport and dosing of the release agent. As a result, the nozzle can be kept higher than the tank so that even higher vertical surfaces can be sprayed easily.



Take a look at the BEMA® product video

www.mantis-ulv.com/en/industrial-applications/products/hand-held-units

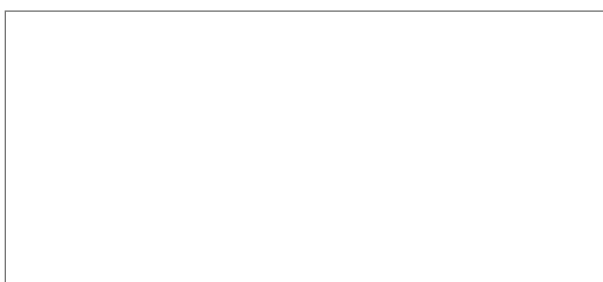


	BEMA 1000	BEMA 1000K	BEMA 10.000	BEMA-P 10.000	BEMA-P 1000K
Art. No:	103776	103944	103716	103476	103638
Dosage:	dosage valve			pump	
Tank volume:	1 litre	1 litre	10 litre	10 litre	1 litre
Shaft length:	90 cm	40 cm	90 cm	90 cm	40 cm
Weight:	1,9 kg	1,7 kg	1,9 kg	1,9 kg	1,7 kg
Battery time:	5 h	5 h	5 h	4 h	4 h

MANTIS ULV® professional spraying systems

With over 40 years experience in the development, production and sale of professional spraying systems for a variety of application areas and industries, Mantis offers high quality systems for the most efficient and user-friendly application of liquid preparations. Beyond MANTIS ULV® spraying systems and BEMA® handheld sprayers for industrial and healthcare applications, Mantis also offers MAFEX® ULV spraying systems for crop protection and MANKAR® and BioMant systems for weed control.

Please visit our website www.mantis-ulv.com for more information on the latest products and developments



We can help you find the right solution!



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